

# MACH VI-VII

## HIGH PERFORMANCE MICROFICHE SCANNERS

FROM THE FIRST NAME IN MICROFILM SCANNING

### LEADING THE INDUSTRY

In 1989, **Mekel Technology** introduced the first microfilm scanner to the world, followed closely by its first microfiche scanner. Today, the Mekel **MACH-series microfiche scanners** are the most advanced fiche scanning systems on the market.

- Handles various microfiche and jacket formats  
**NEW!** Now handles **aperture cards**.
- Offers advanced image quality capture at high speeds from even the most difficult film
- Widely-recognized as the most automated, reliable and easiest-to-use fiche scanners in the industry

### VERSATILITY AND SUPERIOR IMAGE QUALITY

**COM. Jackets. Step and Repeat.** Using the latest in Mekel's CCD, lens and "smoothlight" fiber optic technology, the **MACH** fiche scanners demonstrate an ability to seamlessly convert any format of microfiche to various electronic image formats. Providing the highest optical dpi in the industry, Crowley microfiche scanners deliver clear and consistent image quality while automatically regulating density variations common to many microfiche. Image processing features include:

- Automatic crop
- Automatic rotation
- Automatic invert
- Automatic mirror
- Automatic deskew
- Software focus

### HIGH SPEED

In addition to providing high-quality images, the **MACH VII** fiche scanner is designed to operate at speeds of up to 200 images per minute. The **MACH VI** fiche scanner, a mid-range unit, achieves up to 100 images per minute.

**Both pieces can create bi-tonal and grayscale images simultaneously without impacting speed.**

### EASY TO USE SOFTWARE CREATES ADDED VALUE

**FastFiche**, the **Mekel Technology** microfiche workflow system, eliminates the software learning curve. The simple-to-use sliders, preview screens and flexibility often reserved for more sophisticated applications ensure full-bore scanning within hours of installation and training.

#### FastFiche HIGHLIGHTS

- Easy-access tabs allow for quick job set-up without the need for elaborate and confusing wizards
- Advanced menus for detailed image enhancement features
- Dual-view capability to view bi-tonal and grayscale images simultaneously without impacting speed
- Image quality control and re-scan window that allows for real-time image enhancement
- Flexible and simple to use file-naming capability

**NEW**

### Quantum Process

A break-through in fiche scanning, **Mekel Technology's QuantumProcess\*** workflow software triples scanning productivity and guarantees 100% image capture. Post-capture features include:

- Batch Processing
- Strip Zoom Capability
- Editing Toolkit
- Fixed-grid Frame Replication
- Blip Removal
- Irregular Frame Flag
- Custom Processing
- Multiple Output Options
- Easy Workflow Integration
- Image Enhancement
- File-naming Features
- Auto-split and Book Modes
- "Go To" Command
- Re-detect Frames

\* Field upgrades available for existing units



## EQUIPMENT FEATURES

Camera/Optics	<ul style="list-style-type: none"> <li>10-bit dynamic range with gamma correction grayscale output. Full depth of pixels processed</li> <li>Advanced adaptive Automatic Gain Control (AGC). Handles varying film density in real-time across the film</li> <li>80 megapixel/second camera; 160 megapixel/second output</li> <li>Full 8,192 pixel CCD array for highest optical dpi in the industry</li> <li>Mekel “smoothlight” fiber optic bundle offers balanced lighting across the entire scan area with no hotspots or shadowing</li> </ul>								
Resolution	100-600 true optical dpi; 4x-96x reduction ratio range								
Film Handling	<ul style="list-style-type: none"> <li>Hands-free automatic loading/unloading or manual loading/unloading</li> <li>Input hopper capacity up to 75 fiche <ul style="list-style-type: none"> <li>Optional automatic aperture card loader</li> </ul> </li> </ul>								
Speed (fully processed)	<table> <tr> <th>MACH VI</th><th>MACH VII</th></tr> <tr> <td>24x/200 dpi – up to 75 ppm</td><td>24x/200 dpi – up to 150 ppm</td></tr> <tr> <td>42x/200 dpi – up to 75 ppm</td><td>42x/200 dpi – up to 150 ppm</td></tr> <tr> <td>48x/200 dpi – up to 100 ppm</td><td>48x/200 dpi – up to 200 ppm</td></tr> </table>	MACH VI	MACH VII	24x/200 dpi – up to 75 ppm	24x/200 dpi – up to 150 ppm	42x/200 dpi – up to 75 ppm	42x/200 dpi – up to 150 ppm	48x/200 dpi – up to 100 ppm	48x/200 dpi – up to 200 ppm
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Formats	Supports all standard aperture card and fiche types including standard or long jackets; COM; AB Dick; Ultra Fiche and Microx. Images can be 16mm or 35mm; combo 16mm/35mm; simplex or duplex; positive or negative; Diazo; Silver; Vesicular; duplicates; cine/comic mode								
Hardware Enhancements	<ul style="list-style-type: none"> <li>Real-time image sharpen and enhancement done in hardware; no reduction in throughput</li> <li>Optional microcard module</li> </ul>								

## SOFTWARE FEATURES

Image Processing	<ul style="list-style-type: none"> <li>Continuous automatic scanning</li> <li>Interactive selection of individual images or automatic capture of entire fiche row as an individual image</li> <li>Real-time automatic and manual control of rotation, cropping, deskew and automatic compression of film background density variations</li> <li>Real-time image processing provides 5x the typical processing speed</li> <li>Task set-up by job or saved in set-up file</li> </ul>
Frame Detection	<ul style="list-style-type: none"> <li>Single-pass intelligent pre-scan automatically detects all images regardless of size or location</li> <li>“Presence Prescan” feature allows for faster throughput on COM by automatically detecting and scanning only those frames that contain data</li> </ul>
Title Bar/Full-Fiche Imaging	<ul style="list-style-type: none"> <li>Fully- and/or user-definable title bar can be saved along with images scanned from fiche (opaque or translucent)</li> <li>Full-fiche pre-scan image can also be saved along with images scanned from fiche</li> </ul>
Viewing/Browsing	<ul style="list-style-type: none"> <li>Full or partial screen in real-time or by thumbnail, emulating fiche layout</li> <li>Real-time dual view of bi-tonal and grayscale images</li> </ul>
File Formats	<p>Simultaneous output of grayscale and bi-tonal formats</p> <p>Output to single/multi-page, bi-tonal TIFF (G3, G4) and JPEG</p> <p>Output to TIFF uncompressed, PDF compressed (single/multi), JPEG2000, PDF/A and others</p>

## TECHNICAL SPECIFICATIONS

Dell high-end multi-processor, multi-core workstation ensure maximum uptime and performance. Please request current specs	
Power Requirements	50Hz or 60Hz/100v to 240v AC/800 watt single-phase, switchable for domestic and international use
Operating System	Windows 7 (32- and 64-bit), XP or Vista utilizing <b>FastFiche</b> and/or <b>Quantum</b> software by <b>Mekel Technology</b>
Agency Approvals	FCC, UL and CE certification
Dimensions/Weight	33”l x 18”w x 19”h/130 lbs.

